STATE RETIREMENT SYSTEM
2000-2005 EXPERIENCE STUDY

Introduction

The Public Employee Retirement Administration Commission (PERAC) has completed our second Experience Study of the State Retirement System. This report presents the results of our experience analysis for members of the State Retirement System over the six-year period from January 1, 2000 through December 31, 2005.

The nature of an experience study is to track annual salary increases and how members leave a system (retirement, death, disability, or withdrawal) and adjust our actuarial assumptions based on both this past experience as well as anticipated future experience. This task requires more detailed data than is necessary for an annual actuarial valuation. We received additional information and a number of data listings from the State Retirement Board to complete this study.

Each year as part of the valuation, we test how well the assumptions are working by performing a gain/loss analysis. If plan liabilities increase more than expected, there is an actuarial loss. Conversely, if plan liabilities increase less than expected, there is an actuarial gain. If each year the results consistently produced an actuarial loss (or an actuarial gain), then this would indicate that the assumptions are not properly reflecting actual experience. In this way, the gain/loss analysis serves as a proxy to the performance of a detailed experience study.

We reviewed the gains and losses on plan liabilities (excluding asset gains and losses) from 2000 through 2005. PERAC performed State valuations for each year in this period. Our review of the gains and losses over this period shows that, overall, the actuarial assumptions are reasonable. In three years there were actuarial gains and in the other three years there were actuarial losses. In no year did the gain or loss exceed $400 million. There was a cumulative gain (experience better than anticipated) of approximately $250 million over the 6-year period. This amount is quite small considering the total accrued liability of approximately $21.7 billion as of January 1, 2007 (average gain of less than ½ of 1% each year).

As part of this experience study, we performed a detailed member reconciliation of actual retirements, terminations, and disabilities over the 6-year period. We analyzed these results using not only our valuation data from each year, but also listings generated by the PERAC disability unit and the State Retirement Board's response to a number of our data questions.

The annual funding schedule appropriation (the total plan cost) reflects two sources of plan costs and liabilities. The first is the amortization of the unfunded liability. The actuarial accrued liability less plan assets equals the unfunded liability. The unfunded liability is amortized through FY2023 under the current schedule. In addition to the amortization of the unfunded liability, the annual appropriation also reflects the normal cost (or current cost), which represents the value of benefits accruing during the coming year. The measure of the impact on the total plan cost of any change in assumptions is the impact of that change on these two components.

Introduction (continued)

Although the normal cost and accrued liability directly determine the appropriation under the funding schedule, these items are components that make up a portion of the present value of future benefits (PVFB). The PVFB may be the most accurate measure of the "true" total cost of a plan since it represents the present value of total projected benefits for all active, inactive and retired members. Any change in the actuarial assumptions will change the PVFB and, accordingly, the normal cost and accrued liability (and thereby the amortization of the unfunded liability).

Overall, our proposed assumptions slightly decrease the total plan cost.

It is important to note that the results for the State reflect only one component of the total Commonwealth obligation. The Teachers' experience study will be released later this year. The revised assumptions will first be reflected in our January 1, 2008 actuarial valuation.

We gratefully acknowledge the efforts of the State Retirement Board staff in completing this project.

Respectfully submitted,
Public Employee Retirement Administration Commission

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